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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,350	09/26/2000	Kenneth W. Batcher	72255/02661	4571

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TUCKER, ELLIS & WEST LLP
1150 HUNTINGTON BUILDING
925 EUCLID AVENUE
CLEVELAND, OH 44115-1475

EXAMINER

BARQADLE, YASIN M

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/669,350

Applicant(s)

BATCHER, KENNETH W.

Examiner

Yasin M Barqadle

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2153

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 12, 2004 has been entered.

- Claims 1-41 are presented.

Response to Amendment

2. The amendment filed on April 22, 2004 has been fully considered but are moot in view of the new grounds of rejection.

Response to Amendment

In response to applicant's argument on page 14, last paragraph that `` Sandorfi does not disclose any specifics that would be applicable to an RF application.'' Examiner admits that Sandorfi does not disclose RF application, however, the new reference of Eisenhandler discloses this limitation as explained the rejection of claim 1. (See also col. 5, lines 9-33 and abstract).

Art Unit: 2153

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandorfi US (5768530) in view of Eisenhandler et al (hereinafter ``Eisenhandler'') USPN. (5452291).

As per claims 1, 10, 19, Sandorfi teaches a data processing method and system for transferring data between two processing systems, wherein said two processing systems operate independently, said method comprising (Fig. 2):

receiving a data packet from a physical layer processing system [the physical interface between data exchanging mediums Col. 2, lines 60-67 to Col. 3, lines 1-11; abstract];

storing the received data into a first memory device [Fig. 4, 52, Col. 5, lines 60-67 and col. 18, line 51 to col. 19, line 18]; and

executing a single program instruction on a media access control processor (frame processing circuit works at the MAC layer of the OSI) to directly transfer a header portion and a data portion of the stored data packet to a main memory device [

Art Unit: 2153

with a bypass code the DMA could be conditioned to transfer directly to the system memory col. 14, lines 21-45) Fig. 4 Col.5, lines 60-67; Col. 9, lines 41-58], wherein said media access control layer processor formats the data portion using a host protocol [col. 5, lines 14-67; col. 14, lines 58-67 and Col. 18, lines 51-65].

Although Sandorfi shows substantial features of the claimed invention, he does not explicitly show a receiving a wireless signal from a radio frequency physical layer.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Sandorfi, as evidenced by Eisenhandler USPN. (5452291).

In analogous art, Eisenhandler whose invention is about networking devices for transferring packets between two different media, disclose receiving a wireless signal (93, fig. 3) from a radio frequency physical layer (wireless device 90 [Col. 6, lines 9-33]. Giving the teaching of Eisenhandler, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Sandorfi by employing the system of Eisenhandler for the flexibility of accommodating and transferring a diverse data packets.

As per the limitation of enabling communication of the data portion to a remote host across a wired network (see Eisenhandler col. 5, lines 17-33).

Art Unit: 2153

As per claims 2,11 and 20, Sandorfi teaches the invention, wherein the invention further comprises:

transferring the data portion of the data packet stored in said main memory device to a host memory device, upstream of a host processor, wherein said media access control layer processor formats the data stored in said host memory device using a host protocol [col. 5, lines 14-67; col. 14, lines 58-67 and Col. 18, lines 51-65].

As per claims 3,12 and 21, Sandorfi teaches the invention, wherein said first memory device is a FIFO memory device [Col.5, lines 60-67].

As per claims 4,13 and 22, Sandorfi teaches the invention, wherein said host memory device is FIFO memory device [Col.6, lines 47-64 and col. 14, lines 58-67].

As per claims 5,14 and 23, Sandorfi teaches the invention, wherein the method further comprises bit-aligning the data in said first memory device [Col.5, lines 34-67; col.14, lines 8-32].

As per claims 6, 15, and 32, Sandorfi teaches a data transfer method and system for transferring data between two processing systems, wherein said two processing systems operate independently, said method comprising (Fig. 2):

receiving data packet from a physical layer processing

Art Unit: 2153

system [Col. 2, lines 60-67 to Col. 3, lines 1-11; abstract];

storing the received data packet into a first memory device [Fig. 4, 52, Col. 5, lines 60-67]; and

transferring a header portion and a data packet portion of the stored data to a main memory device [Col. 4, lines 1-34; Col. 5, lines 60-67 and col. 18, line 51 to col. 19, line 18] ; and

executing a single program instruction on a media access control layer processor to store the data portion of the data packet stored in the main memory device to a host memory device upstream of a host processor [Col. 4, lines 1-34; Col. 5, lines 60-67; Col. 9, lines 41-58 and col. 14, lines 58-67].

As per the limitation receiving a wireless signal from a radio frequency physical layer (see the rejection on claim 1, 10 and 19 above).

As per claims 7, 16, and 33, Sandorfi teaches the invention, wherein said media access control layer processing system formats the data portion stored in said host memory device using a host protocol [col. 5, lines 14-67; col. 14, lines 58-67 and Col. 18, lines 51-65].

As per the limitation of enabling communication of the data portion to a remote host across a wired network (see Eisenhandler col. 5, lines 17-33).

Art Unit: 2153

As per claims 8,17,and 34 Sandorfi teaches the invention, wherein said first memory device is a FIFO memory device [Col.5, lines 60-67].

As per claims 9,18,and 35, Sandorfi teaches the invention, wherein said host memory device is FIFO memory device [Col.6, lines 47-64 and col. 14, lines 58-67].

As per claim 24, Sandorfi teaches a system for transferring data between two processing systems, wherein said two processing systems operate independently, said method comprising (Fig. 2):

- a first memory device for storing a data packet received from a physical layer processing system (ASIC physical layer interface) [Fig.4, 52 and Col.5, lines 60-67];

- a main memory device for receiving data stored in the first memory device [Fig. 1,16]; and

- a media access control layer processor for executing a single memory read instruction to directly transfer the data portion of data stored in the main memory device to a host memory device upstream of a host processor [with a bypass code the DMA could be conditioned to transfer directly to the system memory Fig. 4 Col.5, lines 60-67; Col. 9, lines 41-58 and col. 14, lines 21-67].

Art Unit: 2153

As per the limitation receiving a wireless signal from a radio frequency physical layer (see the rejection on claim 1, 10 and 19 above].

As per claims 25, Sandorfi teaches the invention, wherein said media access control layer processing system formats the data stored in said host memory device using a host protocol [col. 5, lines 14-67; col. 14, lines 58-67 and Col. 18, lines 51-65].

As per the limitation of enabling communication of the data portion to a remote host across a wired network (see Eisenhandler col. 5, lines 17-33].

As per claims 26, Sandorfi teaches the invention, wherein said first memory device is a FIFO memory device [Col.5, lines 60-67].

As per claims 27, Sandorfi teaches the invention, wherein said host memory device is FIFO memory device [Col.6, lines 47-64 and col. 14, lines 58-67].

As per claims 28, Sandorfi teaches a data transfer method for transferring data between two processing systems, wherein said two processing systems operate independently, said method comprising (Fig. 2):

receiving a data packet from a physical layer processing system, wherein said data packet includes a header portion and a data portion [Col. 2, lines 60-67 to Col. 3, lines 1-11; Col.5,

Art Unit: 2153

lines 60-67 and col. 18, line 51 to col. 19, line 18];

storing the received data packet into a first memory device [Fig. 4, 52, Col. 5, lines 60-67]; and

directly transferring the data portion of the data packet from the first memory to a host memory device [col. 14, lines 21-45) Fig. 4 Col. 5, lines 60-67; Col. 9, lines 41-58]; and

executing at least one program instruction on a media access controller processor to transfer the header portion to a main memory device [with a bypass code the DMA could be conditioned to transfer directly to the system memory col. 14, lines 21-45 Fig. 4 Col. 5, lines 60-67; Col. 9, lines 41-58].

As per the limitation receiving a wireless signal from a radio frequency physical layer (see the rejection on claim 1, 10 and 19 above).

As per claims 29, Sandorfi teaches the invention, wherein the media access control layer processing system formats the data stored in said host memory device using a host protocol [col. 5, lines 14-67; col. 14, lines 58-67 and Col. 18, lines 51-65].

As per claims 30, Sandorfi teaches the invention, wherein said first memory device is a FIFO memory device [Col. 5, lines 60-67].

As per claims 31, Sandorfi teaches the invention, wherein said host memory device is FIFO memory device [Col. 6, lines 47-64 and col. 14, lines 58-67].

Art Unit: 2153

As per claim 36, Sandorfi teaches a system for transferring data between two processing systems, wherein said two processing systems operate independently, said method comprising (Fig. 2):

a first memory device for storing a data packet received from a physical layer processing system, wherein said data packet includes a header portion and a data portion [the physical interface between data exchanging mediums in OSI model Fig. 4, 52, Col. 5, lines 60-67 and col. 18, line 51 to col. 19, line 18];

a media access control layer (frame processing circuit works at the MAC layer of the OSI) processor for executing at least one program instruction on to transfer the header portion from the first memory device to a second memory device [Fig. 4, Col. 4, lines 1-34; Col. 5, lines 60-67; Col. 9, lines 41-58]; and

a hardware logic enabled by media access control layer processor to transfer the data portion from the first memory device to a host memory device upstream of a host processor [Fig. 4, Col. 4, lines 1-34; Col. 5, lines 60-67; Col. 9, lines 41-58 and col. 14, lines 58-67].

As per the limitation receiving a wireless signal from a radio frequency physical layer (see the rejection on claim 1, 10 and 19 above).

As per claim 37, Sandorfi teaches a system according to claim 36, wherein the media access control layer processor formats the data

Art Unit: 2153

stored in said host memory device using a host protocol [col. 5, lines 14-67; col. 14, lines 58-67 and Col. 18, lines 51-65].

As per the limitation of enabling communication of the data portion to a remote host across a wired network (see Eisenhandler col. 5, lines 17-33).

As per claim 38, Sandorfi teaches a system according to claim 36, wherein said first memory device is a FIFO memory device [Col.5, lines 60-67].

As per claim 39, Sandorfi teaches a system according to claim 37, wherein said host memory device is FIFO memory device [Col.6, lines 47-64 and col. 14, lines 58-67].

As per claims 40 and 41, Sandorfi teaches a data processing system comprising:

a physical layer processor for transferring a data packet to a memory location identified by an address stored in a an address pointer register [Fig. 4, Col. 13, lines 8-67 and Col.14, lines 1-55];

a first memory for storing at least a portion of the data packet at one of a plurality of memory location, each memory location identified by an address register [Fig. 4, Col. 13, lines 8-67 and Col.14, lines 1-55]; and

a FIFO memory for storing data, wherein the physical layer

Art Unit: 2153

processor receives an instruction to transfer the at least a portion of the data from the respective memory location of the first memory identified by the address stored in the address pointer register to the FIFO memory, and automatically increments the address stored in the address having a first parameter identifying the address pointer register, and a second parameter identifying the FIFO memory [Figs 4&5, Col.5, lines 60-67; col. 9, lines 4-27; Col. 13, lines 8-67 and Col.14, lines 1-55; Col.19, lines 19-63].

As per the limitation receiving a wireless signal from a radio frequency physical layer (see the rejection on claim 1, 10 and 19 above).

Conclusion

The prior made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone number is 703-305-5971. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 703-305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are


Art Unit: 2153

703-872-9306 for regular communications and 703-746-7238 for
After Final communications.

Any inquiry of a general nature or relating to the status of
this application or proceeding should be directed to the
receptionist whose telephone number is 703-305-3900.

Yasin Barqadle

Art Unit 2153



BLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100